**Estimating Loads for a PCB TMDL in the Delaware Estuary**

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The Delaware River Basin Commission (DRBC) is developing a Total Maximum Daily Load (TMDL) for Polychlorinated Biphenyls (PCBs) in the Delaware Estuary. Initial assessment show that the overall load to the estuary is derived from many sources, including point discharges, tributaries, combined sewer overflows, atmospheric deposition, and rainfall runoff. Since each source category contributes significantly to the overall load, and since the anticipated water quality target is substantially lower than currently observed water column concentrations, careful assessment of each load category is needed for both calibration of the water quality model and for development of load reduction strategies.

To evaluate load categories on an equivalent basis, DRBC estimated the daily loads from all source categories for a continuous 20 month period. The continuous load approach synthesizes data from many sources and allows a direct comparison of source categories. Sources can be compared at many different resolutions, from daily comparisons of individual sources, to total estuary loads. DRBC expects that this approach will be especially beneficial in determining where best to focus action to reduce the PCB load to the estuary. The daily loads show the relative importance of point discharges, tributaries, CSOs, rainfall runoff, and atmospheric deposition to the overall PCB mass balance in the estuary.

To accomplish the daily load estimations, DRBC has developed innovative partnerships which allowed completion of extensive data collection within an accelerated time frame. By coordinating funding resources, technical approach, and the resultant data, DRBC was able to direct different agencies and programs toward a common goal of developing the PCB TMDL.

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